e ADVICE

GREEN PC PROJECT

WE CARE ABOUT ENVIRONMENT

The "Green PC" project involves installing a software application called "PowerMAN" on all company desktop PCs (approximately 5,000). "PowerMAN" helps towards the implementation of energy-saving policies by placing PCs in stand-by mode when they are not used for a set amount of time (for example, after 10 minutes of inactivity).
This initiative results in a reduction in energy consumption during periods when PCs are inactive, such as during lunch breaks and meetings, and especially at night if users forget to switch off their computers before leaving the office. Unbeknownst to the users, we carried out an experiment at our Fano branch on a sample of approximately 100 PCs from different departments. After installing the software we found that there was a significant reduction in the average number of hours that the PCs were inactive each day, from 6.3 to 2.8 hours each.
Assuming:

- 0.05 Kw per pc/hour (energy consumption measured during the period of inactivity),
- 0.12 per Kwh (from actual consumption costs),
- 0.45 Kg CO_2 per Kwh (reference data),
- 5,000 PCs on which the software is installed the following annual savings are feasible:

The monetary savings are limited due to the cost of the software licences, whilst the opportunity for reducing CO_2 emissions with respect to the company's relative parameters should be assessed. In the case in question, the savings amounted to approximately 143.7 t of CO_2 a year not being produced and therefore, not emitted into the atmosphere.

To make it easier to understand, we looked at the amount of CO_2 produced by a car being driven some 18,000 km a year, which equates to approximately 2.27 tonnes of greenhouse gases emitted per year (Source: UP, NomismaEnergia NE).

$$\frac{143.7\ [CO_2]}{2.3\ [tCO_2/car]} \cong 60\ cars$$

The process of installing the "PowerMAN" software on PCs is currently underway and it is an initiative that can be implemented in most Saipem offices. As the number of PCs included in the program increases, so too will the resulting environmental benefits and the savings in energy and monetary terms.

WITHOUT POWERMAN		WITH POWERMAN		SAVINGS	
Inactive hours per PC/day	6.3	Inactive hours per PC/day	2.8	Inactive hours per PC/day	3.5
No. PCs	5,000	No. PCs	5,000	No. PCs	5,000
kW/PC	0.05	kW/PC	0.05	kW/PC	0.05
Days/Year	365	Days/Year	365	Days/Year	365
Inactive hours per PC/YEAR	2,299.50	Inactive hours per PC/YEAR	1,022.00	Inactive hours per PC/YEAR	1,277.50
Total Estimated Inactive hours	11,497,500.00	Total Estimated Inactive hours	5,110,000.00	Total Estimated Inactive hours	6,387,500.00
EUR / kWh	0.12	EUR / kWh	0.12	EUR / kWh	0.12
CO_2 kg / kWh	0.45	CO_2 kg / kWh	0.45	CO_2 kg / kWh	0.45
Total Estimated Inactive kWh	574,875.00	Total Estimated Inactive kWh	255,500.00	Total Estimated Inactive kWh	**319,375.00**
Total Estimated Inactive CO_2	258,693.75	Total Estimated Inactive CO_2	114,975.00	Total Estimated Inactive CO_2	**143,718.75**
Total Estimated Inactive Cost	68,985.00	Total Estimated Inactive Cost	30,660.00	Total Estimated Inactive Cost	**38,325.00**